

REMARKS

This application has been carefully reviewed in light of the Office Action dated June 6, 2007. Claims 1 to 39, 44, 45 and 53 to 58 are in the application, of which Claims 1 and 53 to 58 are independent. Reconsideration and further examination are respectfully requested.

Independent Claim 1 and its dependent claims were rejected under 35 U.S.C. § 112, second paragraph, for alleged indefiniteness. In response, independent Claim 1 has been amended so as to refer to a “information” processing apparatus, thereby correcting a typographic error which incorrectly referred to a “image” processing apparatus. Withdrawal of the rejection of this claim is respectfully requested.

Claims 53 to 58 were rejected under 35 U.S.C. § 112, for alleged indefiniteness over the nature of the device that is controlled. In response, each of these claims has been amended so as to clarify that the device controlled is a multifunction network device. Withdrawal of these rejections is respectfully requested.

Claims 55 and 56 were rejected under 35 U.S.C. § 101 as allegedly being directed to non-statutory subject matter. The rejection is respectfully traversed since the rejection itself concedes that the claims are “directed toward an apparatus”, which clearly falls into one of the four enumerated categories of statutory subject matter. In view of this concession in the Office Action, which is found at page 5 thereof and which should sweep aside any other issues raised by the Office Action, it is not understood how the rejection can be sustained. In particular, it is not understood why the Office Action states that the

claims fail to disclose a “positive recitation of hardware element, manufacture or composition of matter”, since as also conceded at page 5 of the Office Action, Claim 55 positively recites a detector, instruction means and sending means. Withdrawal of the rejection is respectfully requested.

Independent Claims 1, 53, 55 and 57 were rejected under 35 U.S.C. § 103(a) over U.S. Patent 6,125,390 (Touboul) in view of U.S. Patent 6,546,484 (Hirai) and further in view of U.S. Patent Application Publication 2003/0037098 (Niwa^{1/}). All claims depending from independent Claim 1 have been rejected as above, or further in view of U.S. Patent 5,696,701 (Burgess) or U.S. Patent 6,167,567 (Chiles). The rejections are all respectfully traversed.

In maintaining its rejection over Touboul, the Office Action asserts that Touboul “explicitly discloses a method for manufacturing a multifunction device on a network”. See page 6 of the Office Action, and also page 24 in which it is asserted that “Touboul’s system is limited to management of the multifunction network devices such as workstations”. Together, these portions of the Office Action signify that the PTO has incorrectly equated a multifunction device with an ordinary workstation. Indeed, as previously maintained, Touboul nowhere even mentions a “multifunction device”, and

^{1/}As previously asserted, the USPTO’s reliance on the U.S. published application to Niwa is improper under 35 U.S.C. § 103(c), since Niwa and the subject application are commonly owned by Canon Kabushiki Kaisha. It is recognized that Niwa has a published foreign counterpart, at Japan 7-93230, published April 7, 1995. A machine-generated translation of the Japanese publication has been obtained and is attached. The rejection over Niwa is being addressed on its technological merits.

nowhere mentions anything even similar to the multifunction devices shown in representative embodiments of the invention described herein.

Touboul's definition of a workstation is shown in his Figure 2, and such a definition does not admit of a multifunction device. The claims herein have been amended so as to specify that a multifunction device includes "an image processing apparatus with scanning and printing capabilities controlled by function modules". Such a definition is different from anything that might be disclosed by Touboul.

In reliance on columns 8 and 9 of Touboul, the Office Action further took the position (at page 7 thereof) that Touboul describes the reconfiguration of a multifunction network device by downloading a software module from an information processing apparatus. As noted above, Touboul does not even describe a multifunction network device, and thus could not possibly describe the reconfiguration of one. However, even to the extent that Touboul were somehow misread to describe the reconfiguration of a multifunction device by download of a software module, Touboul would still fail to describe that such a reconfiguration occurs in a case where there is a detection of a remote reconfiguration event. In this regard, the claims have been amended so as to emphasize that the reconfiguration event is triggered internally of a multifunction device by an increase or a decrease in a demand for hardware resources thereof, and that the reconfiguration event is detected over the network.

With respect to its reliance on the Hirai patent, page 7 of the Office Action asserts that Hirai discloses the process of deleting and/or downloading software modules based on usage of hardware resources. Applicant respectfully disagrees with this assertion,

primarily for the reason that Hirai does not disclose or suggest downloading over a network resource. Moreover, Hirai does not disclose or suggest deletion or download based on the network detection of a reconfiguration event that is triggered internally of a multifunction device by an increase or a decrease in demand for hardware resources thereof. It is true that Hirai might be read by some to disclose that the loading (or deletion) of software modules from RAM is conditioned upon whether the software modules are desired (or no longer desired), but such a condition is not the same as the claimed invention which involves a networked detection of a reconfiguration event triggered internally by an increase or decrease in demand for hardware resources of a multifunction device. In this regard, attention is respectfully directed to claim language which defines “hardware resources” as “including a storage memory for storing a plurality of function modules which include the function modules for controlling the image processing apparatus [which includes scanning and printing capabilities controlled by such function modules], a program memory for use by the function modules, and a processor for executing each of the function modules”.

Applicant has previously traversed the Office Action’s rationale for combining and/or modifying Touboul with Niwa and Hirai, but as far as can be determined, such traversal remains unanswered. See MPEP § 707.07(f):

“Where the Applicant traverses any rejection, the Examiner should, if he or she repeats the rejection, take note of the Applicant’s argument and answer the substance of it” (page 700-126)

Here, it has previously been argued that the Office Action's stated rationale incorrectly uses Applicant's own disclosure. That error is repeated in the instant Office Action, in the paragraph bridging pages 8 and 9:

“Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Touboul in view of Hirai, and further in view of Niwa (the modification will be referred to as Touboul from herein on) in order to manage a network of plurality of multifunction network devices such as digital copiers, imaging devices, etc. ***(Also note that the modification would have been fully compatible because Applicant specification suggests that the Applicant's invention can also be used to manage various other types of network devices, not just network printers, see specification, page 35).***” Office Action, pages 8-9.

It is a clear contravention of patent law to use Applicant's own disclosure of his invention, as part of the rationale for obviousness. Moreover, the Office Action misuses page 35, which very clearly refers to “the invention”. MPEP § 2143 is clear in its prohibition against the use of Applicant's own disclosure, correctly citing to *In re Vaeck*.

This matter was raised in prior responses, but was not apparently addressed in the instant Office Action. Applicant therefore repeats and reasserts this traversal, and respectfully requests a withdrawal of the rejection on this basis.

Applicant also did not apparently receive a response to his traversal on other aspects of the stated rationale for combining and/or modifying Touboul with Niwa and Hirai. Those other bases for traversal are therefore repeated and incorporated herein by reference, as if set forth in full. For example, it was previously asserted that the Office Action provides nothing more than a *post-hoc* rationalization garnered from speculation that is not found anywhere in the cited art. There simply is nothing in the cited art that

provides the evidence to show that one of ordinary skill in the art would have been prompted to modify and/or combine Touboul with Niwa and Hirai, in a manner that would have resulted in the invention. It is therefore respectfully requested for the Office Action to articulate a well-reasoned rejection, based on the technological skills of those of ordinary skill in the art, as to why such a person would have been prompted to modify and/or combine Touboul with Niwa and Hirai in order to arrive at the invention.

The Office Action further entered a rejection of independent Claims 54, 56 and 58, under 35 U.S.C. § 103(a) over Niwa in view of U.S. Patent Application Publication 2001/0025312 (Obata) and further in view of Hirai. The rejections are respectfully traversed.

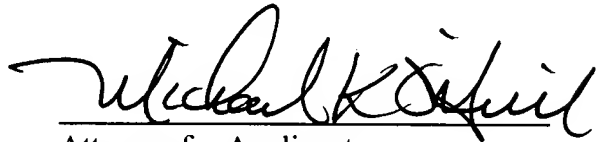
As Applicant understands the rejection, the Office Action takes the position that Niwa shows management of multifunction devices on a network by retrieving software modules from an information processing apparatus on the network, that Obata discloses monitoring of hardware resources, and that Hirai discloses deletion and/or download of software modules based on usage of hardware resources. As indicated above, Applicant respectfully disagrees with the PTO's view of Hirai. Further, in Applicant's view, Obata is unrelated to management of multifunction devices over a network through monitoring of hardware resources on such devices.

Moreover, and as indicated above, Applicant maintains his position that the Office Action has failed to articulate reasons as to why those of ordinary skill in the art would have been prompted to combine and/or modify Niwa with Hirai and Obata, so as to arrive at the claimed invention.

It is therefore respectfully submitted that the § 103 rejection of Claims 45, 56 and 58 should be withdrawn.

Applicant's undersigned attorney may be reached in our Costa Mesa, California office at (714) 540-8700. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Michael K. O'Neill", is written over a horizontal line.

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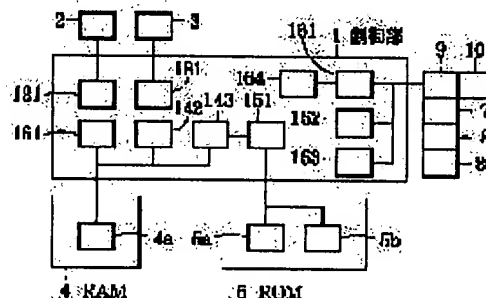
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(54) COMPOUND PERIPHERAL DEVICE

(57)Abstract:

PURPOSE: To freely extend the function processing of the compound peripheral device by performing the read and execution of an application program based on a selection executing instruction and controlling the driving of a function processing means.

CONSTITUTION: A control part 1 is composed of a display control part 121 for controlling indication to a display part 2, operation button analysis part 131 for controlling inputs to from an operation button 3, data read part for controlling the read of data from a RAM 4, execution part 142 for executing a program or



the like stored in the RAM 4, and data write part 143 for controlling the write of data or the like to the RAM 4, or the like. Based on the selection executing instruction generated by the operation button 3, the control part 1 reads and executes any application program down loaded from a server computer to a storage means and the driving of any function processing means is controlled so that the function processing of the compound peripheral device can be easily extended.

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1. This document has been translated by computer. So the translation may not reflect the original precisely.

2. **** shows the word which can not be translated.

3. In the drawings, any words are not translated.

CLAIMS

[Claim(s)]

[Claim 1] Two or more functional processing means to perform different predetermined functional processing, and the means of communications which communicates through the server computer and the telephone line which memorized the application program which plurality closed beforehand, A storage means to download and memorize each ***** application program memorized by said server computer by this means of communications, A directions means memorized for this storage means to shift and to perform selection activation directions of that application program, The compound peripheral device characterized by having a program execution means carry out reading appearance from said storage means based on the selection activation directions by this directions means to shift, to perform that application program and to control actuation of one of said functional processing means.

[Claim 2] The compound peripheral device according to claim 1 characterized by constituting a storage means from an internal-memory medium.

[Claim 3] The compound peripheral device according to claim 1 characterized by constituting a storage means from an external memory medium.

[Claim 4] The compound peripheral device according to claim 1 characterized by providing the application selection means which carries out the selection directions of one of the application programs downloaded from a server computer.

[Claim 5] The compound peripheral device according to claim 1 characterized by providing a transfer means memorized for a storage means to shift, to read that application program and to transmit to other circumference compound equipments through a predetermined communication line.

[Claim 6] Two or more functional processing means to perform different predetermined functional processing, and the means of communications which communicates through the computer and communication line which memorized the application program which plurality closed beforehand, A storage means to download and memorize each *****

application program memorized by said computer by this means of communications, A directions means memorized for this storage means to shift and to perform selection activation directions of that application program, The compound peripheral device characterized by having a program execution means carry out reading appearance from said storage means based on the selection activation directions by this directions means to shift, to perform that application program and to control actuation of one of said functional processing means.

[Claim 7] The compound peripheral device according to claim 6 characterized by constituting a storage means from an internal-memory medium.

[Claim 8] The compound peripheral device according to claim 6 characterized by constituting a storage means from an external memory medium.

[Claim 9] The compound peripheral device according to claim 6 characterized by providing the application selection means which carries out the selection directions of one of the application programs downloaded from a storage means.

[Claim 10] The compound peripheral device according to claim 6 characterized by providing an assignment means to specify beforehand one of the application programs downloaded from a host computer.

[Claim 11] Two or more functional processing means to perform different predetermined functional processing, and the means of communications which communicates through the computer and communication line which memorized the application program which plurality closed beforehand, An external memory means to download and memorize each ***** application program memorized by said computer by this means of communications, A directions means memorized for this external memory means to shift and to perform selection activation directions of that application program, An internal-storage means carry out reading appearance from said external memory means based on the selection activation directions by this directions means to shift, and to load and memorize that application program, The compound peripheral device characterized by having a program execution means to perform application loaded to this internal-storage means, and to control actuation of one of said functional processing means.

[Claim 12] Two or more functional processing means to perform different predetermined functional processing, and a storage means to memorize the application program which each functional processing means performs, A directions means to direct combination functional processing activation with each functional processing means, having the combination actuation control means which carries out reading appearance of each application which analyzed the combination functional directions condition by this directions means, and was memorized by the sequential storage means, and controls combination actuation of each functional processing means -- the description -- ** -- the compound peripheral device to carry out.

[Claim 13] The compound peripheral device according to claim 12 characterized by establishing the control means which controls exclusively activation initiation of the combination functional processing specified while judging the present busy condition of each functional processing means which analyzes the combination functional directions condition by the directions means, and performs combination functional processing.

[Claim 14] A control means is a compound peripheral device according to claim 12 characterized by reporting the present busy condition of each judged functional processing means.

DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Industrial Application] This invention relates to the compound peripheral device which performs functional processing which relates to the peripheral device of a computer apparatus, especially is connected to a computer apparatus, and is different.

[0002]

[Description of the Prior Art] In order for computer peripheral devices, such as the peripheral device of a computer apparatus, for example, a printer etc., to perform only the function with which itself was equipped and to perform functions, such as the other application, for example, an image input, an image information communication link, and file management of image information, conventionally, each peripheral device is connected with a computer through each interface, the high order model and the computer which built the computer system or were equipped with such a function are connected, and usually built the system.

[0003]

[Problem(s) to be Solved by the Invention] Thus, when building a computer system, while peripheral devices increase in number according to required functional processing, distribution cables increase in number and an installation tooth space will be pressed, there was a trouble that great costs suffered from system extensiveness.

[0004] This invention is what was made in order to cancel the above-mentioned trouble. The server computer or communication line connected through the telephone line is minded. Downloading and managing the application program which can perform each functional processing means of the compound peripheral device memorized at the server computer or host computer side to the host computer and the compound peripheral device which can be communicated connected It aims at offering the compound peripheral device which can perform cheaply and efficiently functional modification of each functional processing means, functional expansion, etc., without connecting an external device in any way by performing a required application program.

[0005]

[Means for Solving the Problem] Two or more functional processing means to perform predetermined functional processing in which the 1st compound peripheral devices concerning this invention differ, The means of communications which communicates through the server computer and the telephone line which memorized the application program which plurality closed beforehand, A storage means to download and memorize each ***** application program memorized by said server computer by this means of communications, A directions means memorized for this storage means to shift and to perform selection activation directions of that application program, It has a program execution means carry out reading appearance from said storage means based on the selection activation directions by this directions means to shift, to perform that application program and to control actuation of one of said functional processing means.

[0006] The 2nd compound peripheral device concerning this invention constitutes a storage means from an internal-memory medium.

[0007] The 3rd compound peripheral device concerning this invention constitutes a storage means from an external memory medium.

[0008] The 4th compound peripheral device concerning this invention establishes the application selection means which carries out the selection directions of one of the application programs downloaded from a server computer.

[0009] The 5th compound peripheral device concerning this invention establishes a transfer means memorized for a storage means to shift, to read that application program and to transmit to other circumference compound equipments through a predetermined communication line.

[0010] Two or more functional processing means to perform predetermined functional processing in which the 6th compound peripheral devices concerning this invention differ, The means of communications which communicates through the computer and communication line which memorized the application program which plurality closed beforehand, A storage means to download and memorize each ***** application program memorized by said computer by this means of communications, A directions means memorized for this storage means to shift and to perform selection activation directions of that application program, It has a program execution means carry out reading appearance from said storage means based on the selection activation directions by this directions means to shift, to perform that application program and to control actuation of one of said functional processing means.

[0011] The 7th compound peripheral device concerning this invention constitutes a storage means from an internal-memory medium.

[0012] The 8th compound peripheral device concerning this invention constitutes a storage means from an external memory medium.

[0013] The 9th compound peripheral device concerning this invention establishes the application selection means which carries out the selection directions of one of the application programs downloaded from a storage means.

[0014] The 10th compound peripheral device concerning this invention establishes an assignment means to specify beforehand one of the application programs downloaded from a host computer.

[0015] Two or more functional processing means to perform predetermined functional processing in which the 11th compound peripheral devices concerning this invention differ, The means of communications which communicates through the computer and communication line which memorized the application program which plurality closed beforehand, An external memory means to download and memorize each ***** application program memorized by said computer by this means of communications, A directions means memorized for this external memory means to shift and to perform selection activation directions of that application program, An internal-storage means carry out reading appearance from said external memory means based on the selection activation directions by this directions means to shift, and to load and memorize that application program, It has a program execution means to perform application loaded to this internal-storage means, and to control actuation of one of said functional processing means.

[0016] Two or more functional processing means to perform predetermined functional processing in which the 12th compound peripheral devices concerning this invention differ, A storage means to memorize the application program which each functional processing means performs, It has a directions means direct combination functional processing activation with each functional processing means, and the combination actuation control means which reads each application which analyzed the combination functional directions condition by this directions means, and was memorized by the sequential storage means, and controls combination actuation of each functional processing means.

[0017] The 13th compound peripheral device concerning this invention establishes the control means which controls exclusively activation initiation of the combination functional processing specified while judging the present busy condition of each functional processing means which analyzes the combination functional directions condition by the directions means, and performs combination functional processing.

[0018] The 14th compound peripheral device concerning this invention constitutes a control means so that the present busy condition of each judged functional processing means may be reported.

[0019]

[Function] since a program execution means carries out reading appearance of one of the application programs downloaded for the storage means from the server computer, executes them and controls actuation of one of said functional processing means based on the selection activation directions by the directions means, in the 1st this invention, it becomes possible to perform the functional processing escape of circumference compound equipment free.

[0020] In the 2nd this invention, it is what constituted the storage means from an internal-memory medium, and it becomes possible to download only required application.

[0021] In the 3rd this invention, it is what constituted the storage means from an external memory medium, and it becomes possible to download two or more applications simultaneously.

[0022] In the 4th this invention, since the selection directions of one of the application programs downloaded from a server computer with the directions from an application selection means are carried out, it becomes possible to download only desired application.

[0023] In the 5th this invention, a transfer means becomes possible [carrying out the junction transfer of one of the applications] also to the circumference compound equipment which be memorized for a storage means and which is not equipped with communication facility with a server computer since it shifts, that application program is read and it transmits to other circumference compound equipments through a predetermined communication line.

[0024] since a program execution means performs carrying out the reading appearance of one of the application programs downloaded for the storage means from the host computer based on the selection activation directions by the directions means and controls actuation of one of said functional processing means, in the 6th this invention, it becomes possible [functioning each functional processing means cheaply in an addition and an escape using a simple network].

[0025] In the 7th this invention, since the storage means was constituted from an internal-memory medium, it becomes possible to download only required application.

[0026] In the 8th this invention, since the storage means was constituted from an external memory medium, it becomes possible to download two or more applications simultaneously.

[0027] In the 9th this invention, since an application selection means carries out the selection directions of one of the application programs downloaded from a storage means, it becomes possible [downloading only desired application].

[0028] In the 10th this invention, since an assignment means specifies beforehand one of the application programs downloaded from a host computer, it simplifies the assignment application program transfer control from a host computer, and becomes possible [downloading ***** efficiently].

[0029] In the 11th this invention, please carry out reading appearance, shift from said external memory means based on the selection activation directions by this directions means, load that application program, and an internal-storage means is made to memorize. Since a program execution means performs loaded this application and actuation of one of said functional processing means is controlled It becomes possible to choose required application and to perform each functional processing efficiently, downloading two or more required applications collectively, even when there is little memory space of an internal-storage means.

[0030] In the 12th this invention, since each application with which the combination functional directions condition by the directions means was analyzed, and the combination actuation control means was memorized by the sequential storage means is read and combination actuation of each functional processing means is controlled, it becomes that it is possible in performing advanced compound functional processing which combined various functional processings.

[0031] Since the activation initiation of combination functional processing that a control means was specified controls exclusively, judging the present busy condition of each functional processing means which analyzes the combination functional directions condition by the directions means, and performs combination functional processing, in the 13th this invention, it becomes that it is possible in performing combination functional processing and each functional processing efficiently, avoiding contention with combination functional processing and each functional processing.

[0032] In the 14th this invention, since a control means reports the present busy condition of each judged functional processing means, it becomes possible [reporting certainly the race condition of combination functional processing and each functional processing to a user].

[0033]

[Example]

The [1st example] Drawing 1 is a block diagram explaining the configuration of the compound peripheral device in which the 1st example of this invention is shown.

[0034] The control section which controls the whole peripheral device of the computer by which 1 has two or more devices in drawing, The actuation at the time of initial setting of the peripheral device of this example, and the activity of a device of 2, The manual operation button which an operator uses as an input device in case directions etc. are performed, and the data which 4 can replace, RAM which functions as internal storage which memorizes a control program, a ** printer program, etc., and which can be written, ROM which functions as internal storage of ReadOnly which memorizes beforehand the constant and the fixed data with which 5 was prepared beforehand, a registered control program, fundamental application, etc., and 6 are input/output interfaces. Exchange of the host computer and data which are not illustrated is performed. The external circuit interface which functions as a circuit where 7 performs a call, facsimile data, and the data exchanges, such as digital information, through an external communication line, The line control section for a modular jack for 8 to connect with a main wire and telephone and 9 to control the exchange with the device inside an external communication line capital, In case 10 exchanges facsimile image information through an external communication line In case the 1st modem which performs code translation and playback, and 11 exchange digital data through an external communication line The time stump for the 2nd modem which performs code translation and playback, and 12 connecting commercial telephone, a commercial hand set, etc. outside, and making it usable, The time amount waiting of internal software, and the clock circuit used for time designated actuation, 14 samples speech information. Change into digital information and The voice record output section which consists of ADPCM which reproduces the sampled voice, The sound source which consists of FM sound circuits which 15 deals with information, such as a melody and temperment, as digital information, and are reproduced, The loudspeaker to which 16 carries out sound-reinforcement of the sound information reproduced from said voice record output section 14 and sound source 15, The manuscript reading facsimile transmission which is the application of the peripheral device whose 17 is the example of this invention, The time of being used by the picture input device of a manuscript reading copy and a host computer etc., The image read station which scans image information

and reads as digital data, and 18 as an output unit of a copy, a receiving facsimile manuscript, or a host computer. The printing section which outputs text, image information, graphic form information, etc. to a record medium, and the program stereo which treats 19 by computer, So that external storage, such as a floppy disk which memorizes document data or image information, speech information, etc., a hard disk (HD), or an IC card, and 20 may become still more legible in displaying still more detailed information. Moreover, so that the same activity as a personal computer (PC) can be performed. So that it may further be easy to operate the external CRT interface for connecting CRT for computers to the peripheral device of this example, and 21 and may become. Moreover, so that the same usage as a personal computer (PC) may be made. So that it may further be easy to operate the external keyboard interface for connecting the keyboard for computers to the peripheral device of this example, and 22 and may become. Moreover, so that the same usage as a personal computer (PC) may be made. In order to connect a pointing device called the mouse trackball for computers to the peripheral device of this example, As for an external pointing device interface and 23, [which can be post-installed as an option] For example, the extended device equipped with extended devices, such as a videodisk dynamic-image interface and an interface for LAN connection, The main power supply switch whose 25 24 specifies the power source of the peripheral device of this example for the power source of the peripheral device of this example, and specifies turning on and off, 26 outside (the host computer mainly connected is applicable), from the peripheral device of this example. The subcurrent supply section for supplying a power source, the subelectric power switch which specifies manually turning on and off whose 27 supplies a power source outside from said subcurrent supply section, The subpower control section which controls turning on and off whose 28 supplies a power source outside from said subcurrent supply section by the assignment from a control section 1, The data signal line by which 29 is used for exchange of the data of the host computer connected with the peripheral device of this example, The path cord to the telephone by which 30 is connected to the path cord to external circuits, such as a dial-up line, and 31 is connected outside, The path cord to the path cord to CRT by which 32 is connected outside, the keyboard by which 33 is connected outside, It is a power-source line to the host computer by which the path cord to the pointing device by which 34 is connected outside, and 35 are connected to the power-source line to the peripheral device of this example, and 36 is connected outside.

[0035] thus, since a control section 1 carries out reading appearance of one of the application programs downloaded for the storage means from the server computer, executes them and controls actuation of one of said functional processing means based on the selection activation directions by the manual operation button 3, it becomes that it is possible to perform the functional processing escape of circumference compound equipment free in the constituted compound peripheral device.

[0036] Moreover, it is what constituted the storage means from RAM4, and it becomes possible to download only required application.

[0037] Furthermore, it is what constituted the storage means from the external memory section 19, and it becomes possible to download two or more applications simultaneously.

[0038] Moreover, since the selection directions of one of the application programs downloaded from a server computer with the directions from a manual operation button 3 are carried out, it becomes possible to download only desired application.

[0039] Furthermore, the line control section 9 becomes possible [carrying out the junction transfer of one of the applications] also to the circumference compound equipment which be memorized to RAM4 and which is not equipped with communication facility with a server computer since it shifts, that application program is read and it transmits to other circumference compound equipments through a predetermined communication line.

[0040] moreover, since a control section 1 is performed carrying out reading appearance of one of the application programs downloaded from the host computer to RAM4 based on the selection activation directions by the manual operation button 3 and controls actuation of one of said functional processing means, it becomes possible [functioning each functional processing means cheaply in an addition and an escape using a simple network].

[0041] Furthermore, since the storage means was constituted from RAM4, it becomes possible to download only required application.

[0042] Moreover, since the storage means was constituted from the external memory section 19, it becomes possible to download two or more applications simultaneously.

[0043] Furthermore, since a manual operation button 3 carries out the selection directions of one of the application programs downloaded from RAM, it becomes possible [downloading only desired application].

[0044] Moreover, since a manual operation button 3 specifies beforehand one of the application programs downloaded from a host computer, it simplifies the assignment application program transfer control from a host computer, and becomes possible [downloading ***** efficiently].

[0045] Furthermore, based on the selection activation directions by this manual operation button 3, please carry out reading appearance, shift from said external memory section 19, load that application program, and RAM4 is made to memorize. Since a program execution means performs loaded this application and actuation of one of said functional processing means is controlled It becomes possible to choose required application and to perform each functional processing efficiently, downloading two or more required applications collectively, even when there is little memory space of RAM4.

[0046] Moreover, since each application with which the combination functional directions condition by the manual operation button 3 was analyzed, and the combination control section 1 was memorized by the sequential storage means is read and combination actuation of each functional processing means is controlled, it becomes possible to perform advanced compound functional processing which combined various functional processings.

[0047] Furthermore, since the activation initiation of combination functional processing in_which the control section 1 was specified controls exclusively, judging the present busy conditions which analyze the combination functional directions condition by the manual operation button 3, and perform combination functional processing, such as each

printer and a scanner, it becomes that it is possible in performing combination functional processing and each functional processing efficiently, avoiding contention with combination functional processing and each functional processing.

[0048] Moreover, since a control section 1 reports the present busy condition of each judged functional processing means, it becomes possible [reporting certainly the race condition of combination functional processing and each functional processing to a user].

[0049] Drawing 2 is a block diagram explaining the system configuration of the server computer which communicates with the compound peripheral device shown in drawing 1 .

[0050] In drawing, 51 is a control section and consists of the data signal receipt means 51-1, the data signal sending-out means 51-2, a communications protocol analysis means 51-3, a read-out means 51-4, and file search means 51-5 grade.

[0051] 52 is a display, for example, consists of CRT displays. 53 is the input section, for example, consists of a keyboard, a pointing device, etc. 54 is the internal-storage section and consists of RAM etc. 55 is the external memory section and consists of a floppy disk, a hard disk (HD), etc. 56 is the telephone line and is connected to a modem 57. 58 is the line control section and controls connection/cutting with the telephone line 56.

[0052] Drawing 3 is a block diagram explaining the detail configuration of a control section 1 shown in drawing 1 , and has given the same sign to the same thing as drawing 1 .

[0053] In drawing, 121 is a display and control section and controls the display to a display 2. 131 is the manual operation button analysis section, and controls the input from a manual operation button 3. 141 is the data readout section and controls read-out of the data from RAM4. 142 is the activation section and performs the program memorized by RAM4. 143 is the data write-in section and controls the writing of the data to RAM4 etc. 151 is the read-out section and reads the program or data memorized by ROM5. 161 is the data receipt section and receives the data from a server computer. 162 is the data transmitting section and transmits data to a server computer. 163 is the dial section. 164 is the protocol analysis section and performs analysis processing of a protocol. 4a is [a program control table and 5b of a program storage area and 5a] the telephone number storing fields of a server computer.

[0054] The starting processing actuation in the compound peripheral device concerning this invention is explained referring to the flow chart shown in drawing 4 hereafter.

[0055] Drawing 4 is a flow chart which shows an example of the starting procedure in the compound peripheral device concerning this invention. In addition, (1) - (13) shows each step.

[0056] First, if a power source starts close to a peripheral device, the read-out section 151 reads the telephone number of a server computer from telephone number storing field 5b, and the dial section 163 will dial the telephone number, and will telephone (1). And if it stands by that a circuit is connected and (2) and a circuit are connected, the protocol analysis section 164 will perform an initial protocol using the data transmitting section 162 and the data receipt section 161 (3). If an initial protocol is completed, the read-out

section 151 will read the first program name loaded in a peripheral device from program control table 5a in ROM5 (4). And the data transmitting section 162 sends out a transfer request of this program name file to a server computer (5). answerback of as opposed to [according to this] server computer or a transfer request in the data receipt section 161 -- reception (6) and the answerback concerned -- a transfer response ***** -- judging -- (7) and (9) by which the data write-in section 143 will write a sequential program in program storage area 4a of RAM4 if it will progress after a step (11) if it becomes NO, and it becomes YES and the data receipt section 161 will receive the data transfer of waiting (8) and a program file for the data transfer of a program file from a server computer. subsequently, a ***** [that the flag which shows the end of file to the data which the data receipt section 161 received is in close] -- judging -- (10) -- if it becomes NO -- a step (8) -- return -- if it becomes YES -- the last program ***** -- judging -- (11) -- if it becomes YES, the line control section 9 will disconnect the telephone line, and will end the processing by the side of (13) and *****.

[0057] On the other hand, at a step (11), in NO, the following program name is acquired from program control table 5a, it returns to (12) and a step (5), and repeats processing.

[0058] Drawing 5 is a flow chart which shows an example of the startup procedure by the side of the server computer connected to the compound peripheral device concerning this invention. In addition, (1) - (11) shows each step.

[0059] Each step has the program which is residing permanently and operating within the internal-storage section 54 of a server computer, and each means in a control section 51 performs processing within the program.

[0060] First, if a telephone call is got, (1) and the line control section 58 will connect a circuit, and (2) and the communications protocol analysis means 51-3 will perform an initial protocol (3). Then, if the data signal receipt means 51-1 receives a transfer request (4) which stands by the transfer request from a peripheral device, and here, the program name to which the file search means 51-5 has been sent about the request will be searched from the external memory section 55 (5). and a ***** [that the requested program file was found] -- judging -- (6) -- if it becomes NO, transfer ***** will be returned to a peripheral device at delivery (11) and a step (10).

[0061] On the other hand, by the judgment of a step (6), the data signal sending-out means 51-2 sends out a transfer response to a peripheral device, (7) and the read-out means 51-4 read the program file it was requested in the external memory section 55, and the data signal sending-out means 51-2 carries out data transfer of the case of YES to a peripheral device (8). subsequently, a ***** [having transmitted the flag which shows end-of-file **] -- judging -- (9) -- if it becomes NO -- a step (8) -- return and a ***** [that the circuit was cut when standing by the transfer request again and becoming YES] -- judging -- (10) -- if it becomes NO -- a step (4) -- return -- processing will be ended if it becomes YES.

[0062] In program execution, the manual operation button analysis section 131 performs the program by which one was specified out of one or more applications, and the activation switch was pushed with the manual operation button of the input section 3 and as which the data readout section 141 was specified from program storage area 4a of RAM4 when thing recognition was carried out.

[0063] Drawing 6 is drawing showing the 1st communications protocol between the compound peripheral device shown in drawing 1 , and a server computer.

[0064] As shown in this drawing, by performing communications processing, processing at the time of the startup of a between [a peripheral device and a server computer] is performed, and a desired program is executed.

[0065] in addition, as the point which stores the application program transmitted and loaded from a server computer in this example in a peripheral device You may be the external memory section 55 instead of RAM4. In this case In program execution, the manual operation button analysis section 131 with the manual operation button of the input section 3 one was specified out of one or more application programs, and the activation switch was pushed, if thing recognition is carried out The program which read the program specified out of the program to which the program specified out of two or more programs was read into, and the data readout section 141 was written in the external memory section 55, and was specified from program storage area 4a of RAM4 is performed.

[0066] Drawing 7 is a flow chart which shows an example of the application executive operation procedure by the side of the peripheral device in the compound peripheral device concerning this invention. In addition, (1) - (12) shows each step. Moreover, the processing shown in this example is equivalent to the processing by the side of the peripheral device at the time of performing application closed within the peripheral device.

[0067] First, if it recognizes that the manual operation button analysis section 131 specified one out of one or more applications from the manual operation button 3, and the activation switch was pushed, (1) and the read-out section 151 will read the telephone number of a server computer from telephone number storing field 5b, and the dial section 163 dials the telephone number, and telephones (2). And if a circuit is connected, (3) and the protocol analysis section 164 will perform an initial protocol using the data transmitting section 162 and the data receipt section 161 (4). Subsequently, if an initial protocol is completed, the read-out section 151 will read the program name of the program performed from program control table 5b of ROM5. Subsequently, if the data transmitting section 162 sends a transfer request of this program name file to a server computer, reception (6) and its answerback judge in answerback whether it is a transfer response from a server computer from (5) and the data receipt section 161, and a circuit will be cut, in order to end processing, without progressing to a step (11), sending out advice of processing termination to a server computer, and performing program execution if it becomes NO (when transfer refusal is received), (7) and.

[0068] If it becomes YES by the judgment of a step (7), and the data receipt section 161 will stand by the data transfer of the program file from a server computer and data transfer will be received on the other hand (8), (9 by which the data write-in section 143 writes a program in program storage area 4a of RAM4 one by one). Subsequently, all the file contents of the program which judged whether the flag which shows the end of file to the received data would be in close, and requested it by (10) and its data read and perform the program by which it judges that it received, the line control section 58 cuts a circuit,

and (11) and the data readout section 141 are written in program storage area 4a of RAM4, and end (12) and processing.

[0069] Drawing 8 is a flow chart which shows an example of the application executive operation procedure by the side of the server computer in the compound peripheral device concerning this invention. In addition, (1) - (11) shows each step. Moreover, each means of a control section 51 has the composition of performing processing of each step, in the program which is residing permanently and operating within the internal-storage section 54 of a server computer.

[0070] If a telephone call is got, (1) and the line control section 58 will connect a circuit, and (2) and the communications protocol analysis means 51-3 will perform an initial protocol (3). Then, if the data signal receipt means 51-1 stands by the transfer request from a peripheral device and receives (4) and a transfer request, the program name to which the file search means 51-5 has been sent about the request will be searched from the external memory section 55 (5). And when it judges whether the requested program file was found, (6) and the requested program file are found and delivery (7) and the requested program file do not find [the data signal sending-out means 51-2] a transfer response in a peripheral device, transfer refusal is progressed to henceforth [a step (11)] in order to wait for the advice of processing termination from delivery (8) and a peripheral device to a peripheral device.

[0071] Subsequently, after sending a transfer response, the read-out means 51-4 reads the content of the carrier beam program file for the request in the external memory section 55, and the data signal sending-out means 51-2 transmits data towards a peripheral device (9). subsequently, a ***** [having transmitted the end-of-file ** flag] -- judging -- (10) -- if it becomes NO -- a step (9) -- return -- processing will be ended, if it becomes YES, and line disconnection will be stood by and (11) and a circuit will be cut.

[0072] Drawing 9 is drawing showing the 2nd communications protocol between the compound peripheral device shown in drawing 1 , and a server computer.

[0073] As shown in this drawing, by performing communications processing, processing at the time of the startup of a between [a peripheral device and a server computer] is performed, and a desired program is executed.

[0074] Drawing 10 is a block diagram explaining other detail configurations of a control section 1 shown in drawing 1 , and has given the same sign to the same thing as drawing 1 and drawing 3 .

[0075] In drawing, 4b is a program control table storage region, has memorized the program control table shown in drawing 13 for details, and has memorized the telephone number of the peripheral device which has the specified application program, and the program number in RAM of the terminal.

[0076] The application executive operation actuation by the side of the peripheral device in the compound peripheral device concerning this invention is explained referring to the flow chart shown in drawing 11 hereafter.

[0077] Drawing 11 is a flow chart which shows an example of the application executive operation procedure by the side of the peripheral device in the compound peripheral device concerning this invention. In addition, (1) - (11) shows each step.

[0078] First, if it recognizes that the manual operation button analysis section 131 specified one out of one or more applications from the manual operation button 3, and the activation switch was pushed, the data readout section 141 will read program control table 4b of RAM4, and will obtain the telephone number of the peripheral device which has the specified application program, and the program number in RAM of the terminal (1). Subsequently, the dial section 163 dials the telephone number, and telephones (2). If a circuit is connected, (3) and a protocol 164 will perform an initial protocol by the data transmitting section 162 and the data receipt section 161 (4). If an initial protocol is completed, the data transmitting section 162 will specify the program number in RAM. This program file to a partner's peripheral device Subsequently, delivery (5), The answerback whose reception (6) and data receipt section 161 received [the data receipt section 161] answerback from the partner peripheral device judges whether it is a transfer response. (7), If it will progress after a step (11) if it becomes NO, and it becomes YES and the data receipt section 161 will receive reception (8) and data transfer for the data transfer of a partner's peripheral device to a program file The received data are written in program storage area 4a of RAM4. (9), It is judged that all of return and the content of the file of the program requested by the data when becoming YES were received to the step (8) when becoming NO. a ***** [that the flag which shows the end of file to the received data is in close] -- judging -- (10) -- The line control section 58 disconnects the telephone line, and ends (11) and processing.

[0079] Drawing 12 is a flow chart which shows an example of the application executive operation procedure by the side of the program file transfer in the compound peripheral device concerning this invention. In addition, (1) - (11) shows each step.

[0080] If a telephone call is got, (1) and the line control section 58 will connect a circuit, and (2) and the protocol analysis section 164 will perform an initial protocol (3). The data receipt section 161 stands by the transfer request from a peripheral device. Subsequently, (4), If a transfer request is received, the program corresponding to the program number in RAM as which the data readout section 141 was specified will be searched and read. (5), It judges whether the program specified as program storage area 4a in RAM4 exists. (6) and in not existing Transmit transfer refusal to a partner's peripheral device, progress to henceforth [(8) and a step (11)], and in existing The data transmitting section 162 reads the content of the program delivery (7) and the data readout section 141 were requested for the transfer response by the partner peripheral device from program storage area 4a, and the data transmitting section 162 transmits data towards a peripheral device (9). subsequently, a ***** [having carried out data transfer of the ending flag of data to the last of the content of the program] -- judging -- (10) -- if it becomes NO -- a step (9) - - return and a ***** [having received line disconnection from the peripheral device, when becoming YES] -- judging -- (11) -- if it becomes NO -- a step (4) -- return -- processing will be ended if it becomes YES.

The [2nd example] Drawing 14 is the important section detail block diagram of the compound peripheral device in which the 2nd example of this invention is shown, and has given the same sign to the same thing as drawing 1 .

[0081] In drawing, 1a is the read-out section and reads a file from the external memory section 19. 1b is a display and displays a program effective now. 1c is the manual operation button analysis section, and it recognizes that selection and activation of a

program were directed from the manual operation button 3. 1d is the write-in section and writes the read program in RAM4. 1e is the activation section and performs the program written in RAM4. 1f is the setting-out section and sets up an interrupt table. 1g is the table R/W section and write a program control table. [reading and]

[0082] 3a is a selecting switch, and in case it directs the program to perform, the depression of it is carried out. 3b is an activation switch, and in case the selected program is performed, the depression of it is carried out. 3c is a termination switch, and in case program execution is stopped, the depression of it is carried out.

[0083] 40a -- for an interrupt table storing field and 40d, a program control table storing field and 40e are [a resident-program storing field and 40b / a nonresident program storing field and 40c / the number storing field of effective programs and 40g of a number storing field and 40f] program control table fields.

[0084] Processing actuation is explained at the time of starting in the compound peripheral device concerning this invention, referring to the flow chart shown in drawing 15 hereafter.

[0085] Drawing 15 is a flow chart which shows an example of procedure at the time of starting in the compound peripheral device concerning this invention. In addition, (1) - (15) shows each step.

[0086] First, the number of effective programs which clears 40g of program control table storing fields, and is stored in the 40f of the number storing fields of (1) effective programs is reset to "0" (2). Subsequently, the number of the program effective now stored in number storing field 40e is reset to "0" (3). Read-out section 1a reads a startup file from the external memory section 19, and the command of the beginning in a file is read. Subsequently, (4), When that command judges whether it is the load command of a resident program and is judged by (5) and this judgment to be a load command The resident program which read-out section 1a read the specified resident program from the external memory section 19, and (10) and 1d of write-in sections read is stored in resident program storage area 40a of RAM4 (11). Subsequently, the setting-out section 1 sets the interrupt table to a resident program, and it progresses after a step (13).

[0087] On the other hand, when judged with it being the command which loads a nonresident program by the judgment of a step (5), read-out section 1a reads the nonresident program specified by the command from the external memory section 19, and (6) and the read nonresident program are stored in nonresident program storing field 4b on RAM4 (7). Furthermore, the name, program number, and starting address of a program which carried out "1" increment of the content of 40f of the number storing fields of effective programs which memorize the number of a program effective now, and (8) and 1g of R/W sections loaded to 40d of program control tables are set (9). Thus, add the number of a program effective in number storing field 40e now whenever it loads the program of a transient "1" every, and it goes. It judges whether the processing to the last command was completed. (13), If it becomes NO, the next command of a startup file will be read. To (14) and a step (5) Return, If the above-mentioned processing is repeated and it becomes YES, 1g of R/W sections will substitute the number of the program effective now stored in number storing field 40e for the number of effective programs stored in the

40f of the number storing fields of effective programs, and they will end (15) and processing.

[0088] In addition, in this example, it performs, when the interrupt which the resident program specified generates each program execution, and as for a nonresident program, activation is directed with a manual operation button 3. Moreover, the name of a program effective now is displayed on a display 2.

[0089] Drawing 16 is a flow chart which shows an example of the nonresident program executive operation procedure based on selecting-switch 3a shown in drawing 14. In addition, (1) - (4) shows each step.

[0090] If selection carbon button analysis section 1c recognizes that selection carbon button 3a of a manual operation button 3 was pushed The content of a table (for example, program control table shown in drawing 17) 1g of whose R/W means is 40d of program control table storing fields, and the program number effective now stored in number storing field 4e are read. It judges whether it is in agreement with the number of programs with the effective number of a program effective now. (1), "1 [+]" Carry out the number of an effective program. if it becomes YES -- current -- if the number of an effective program is set to "1", it progresses after (3) and a step (4) and it becomes NO -- current -- If a program number effective now is the last program number in a table, the following program number The 1st program number is set to a program number effective now, and display and control section 1b of a control section 1 displays the name of the program of (2) and its program number on a display 2 (4).

[0091] Then, if manual operation button analysis section 1c recognizes that activation switch 3b was pushed, 1g of table R/W sections will read the program number effective now stored in number storing field 40e, the starting address of the program over that program number will be read, and the program from which activation section 1e begins from this starting address will be performed.

[0092] When hereafter equipped with the external storage which can be replaced, a program is read from the external memory section 19, and it loads on RAM4, and it explains, referring to the flow chart shown in drawing 18 about the case where choose from the loaded programs and it performs.

[0093] Drawing 18 is a flow chart which shows an example of the program load procedure in the compound peripheral device concerning this invention. In addition, (1) - (7) shows each step. If the external memory section 19 is equipped with external storage, 1g of table R/W sections will clear 40d of program control table fields, and they will reset to "0" the number of effective programs stored in the number of a program effective now and the 40f of the number storing fields of effective programs stored in number storing field 40e (1). Subsequently, if read-out section 1a searches a program file and (2) and a program file are found, the program name with which the number of the program effective now stored in (3) number storing field 40e was made into "1" increment, and (4) read-out sections 1a was written into the program name and the program will be read, and 1g of table R/W sections will write them in 40d of program control table fields (5). Subsequently, the next program file retrieval is started from the external memory section 19, and it returns to (6) and a step (3).

[0094] On the other hand, by the judgment of a step (3), in NO After the processing to the last program is completed, to namely, the number of effective programs with which 1g of table R/W sections is stored in the 40f of the number storing fields of effective programs current [which is stored in number storing field 40e] -- current [which substituted the number of an effective program and was stored in number storing field 40e] -- the number of an effective program is reset to "0" and (7) and processing are ended. The program selection and program execution processing actuation in the compound peripheral device concerning this invention are explained referring to the flow chart shown in drawing 19 and drawing 20 hereafter.

[0095] Drawing 19 is a flow chart which shows an example of the program selection / executive operation procedure in the compound peripheral device in which the 2nd example of this invention is shown. In addition, (1) - (12) shows each step.

[0096] In first, the condition that the name of a program effective in a display 2 now is displayed When manual operation button analysis section 1c recognizes that selecting-switch 3a of a manual operation button 3 was pushed, (1), Progress to a step (3) and the content of the table on which 1g of table R/W sections is stored in 40d of program control table storing fields, and the program number effective now stored in number storing field 40e are read. It judges whether the number and the number of effective programs of a program effective now are equal. If it becomes NO, "1" addition (making a program number effective now into the following program number) of the number of a program effective now will be carried out, (4) and the program name of the number of a program effective now will be read from a program control table field, it will display on a display 2, and (5) and processing will be ended.

[0097] on the other hand -- the judgment of a step (3) -- the case (current -- if an effective program number is the last program number in a table) of YES -- current -- it sets to "0" and the program name of (6) and a loaded program is read from 40g of loaded program control tables so that a program of finishing [loading of an effective program number] may be shown, display and control section 1b displays the name of the program of the program number on a display 2, and (7) and processing are ended.

[0098] On the other hand, by the judgment of a step (1), in NO If it judges whether activation switch 3b of a manual operation button 3 was pushed, and it becomes NO and return and YES, i.e., manual operation button analysis section 1c, will recognize (2) and that activation switch 3b was pushed to a step (1) Progress to a step (8) and the program number effective now with which 1g of table R/W sections is stored in number storing field 40e is read. When the number judges whether it is "0" and shows (8) and YES, i.e., a program of finishing [loading], it progresses to a step (12), the program from which activation section 1c begins from a starting address is performed, and processing is ended.

[0099] On the other hand, by the judgment of a step (8), in NO 1g of table R/W sections 40d of program control table storing fields, The data corresponding to the number of the program effective now stored in number storing field 40e stored in the program control table shown in drawing 20 are copied to 40g of program control table storing fields [finishing / loading]. For example, (9), A program is loaded from the external memory section 19 based on the file name of a current effective program. (10), The program from

which a starting address is substituted for the program control table shown in drawing 21 of 40g of program control table storing fields, and (11) activation sections 1c begins from a starting address is performed, and processing is ended.

The [3rd example] Drawing 22 is a block diagram explaining the configuration of the host computer connected to the compound peripheral device in which the 3rd example of this invention is shown, and has given the same sign to the same thing as drawing 2 .

[0100] In drawing, 60 is an input/output interface and is connected to the compound peripheral device through the data signal line 61.

[0101] Drawing 23 is a block diagram explaining the configuration of the compound peripheral device in which the 3rd example of this invention is shown, and has given the same sign to the same thing as drawing 3 .

[0102] The starting processing actuation by the side of a compound peripheral device is explained referring to the flow chart shown in drawing 24 hereafter.

[0103] Drawing 24 is a flow chart which shows an example of the starting procedure of the compound peripheral device in which the 3rd example of this invention is shown. In addition, (1) - (12) shows each step.

[0104] First, if, as for close, a power source is started by the compound peripheral device, the data transmitting section 162 will send advice of processing initiation to a host computer (1). Subsequently, if it stands by that the data receipt section 161 receives a processing initiation response from a host computer and (2) and the response concerned are received, the read-out section 151 will send (3) which reads the first program name loaded in a compound peripheral device from program control table 5a memorized by ROM5, and the transfer request of a program file to a host computer (4). on the other hand, answerback of as opposed to the transfer request from a host computer in the data receipt section 161 -- reception (5) and the answerback concerned -- a transfer response ***** -- judging -- (6) and (8) by which (7) and the data write-in section 143 will write the content of the program in program storage area 4a in RAM4 if it will progress after a step (10) if it becomes NO, and it becomes YES and the data receipt section 161 will receive the data transfer of a program file from a host computer. Subsequently, when it judges whether the flag which shows the end of file to the data which the data receipt section 161 received is in close and (9) and the flag concerned are in close, all the contents of the file of a program requested by the data judge that it received, and shift to transfer processing of the program loaded to a degree. Finally, if transfer processing of a program is completed, the data transmitting section 162 will send out advice of processing termination to a host computer, and will end the processing by the side of (12) and a peripheral device.

[0105] On the other hand, at a step (10), in NO, the following program name is acquired from program control table 5a, and it repeats return and the above-mentioned program file transfer processing to (11) and a step (4).

[0106] Drawing 25 is a flow chart which shows an example of the startup procedure by the side of the host computer shown in drawing 22 . In addition, (1) - (10) shows each step. Moreover, there is a program which resides permanently in the internal-storage

section 54 of a host computer, and is operating, and it has composition which controls actuation of each means by this program.

[0107] First, if the data signal receipt means 51-1 stands by the advice of processing initiation from a compound peripheral device and receives (1) and the advice of initiation concerned, the data signal sending-out means 51-2 will send a processing initiation response to a compound peripheral device (2). If similarly it stands by that the data signal receipt means 51-1 receives the transfer request from a compound peripheral device and (3) and the transfer request concerned are received, the program name to which the file search means 51-5 has been sent about the request will be searched from the external memory section 55 (4). It judges whether the requested program file was found. (5), If it becomes NO, will send out transfer refusal to a compound peripheral device, and it will progress after (9) and a step (10). If it becomes YES, a transfer response is sent out to a compound peripheral device, (6) and after that, the read-out means 51-4 will read the content of the program file it was requested in the external memory section 55, and the data signal sending-out means 51-2 will start data transfer towards a compound peripheral device (7). It judges whether data transfer of the end-of-file ** flag was carried out. Subsequently, (8), if return and data transfer will be continued to a step (7) if it becomes NO, and it becomes YES -- the advice of processing termination -- the carrier beam from a compound peripheral device ***** -- judging -- (10), if it becomes NO That is, when a transfer request is again sent out from a compound peripheral device, without sending advice of processing termination, it returns to a step (3), and if it becomes YES, the processing by the side of a host computer will be ended.

[0108] In program execution, the manual operation button analysis section 131 will perform the program as which the data readout section 141 was specified from program storage area 4a of RAM4, if it recognizes that specified one out of one or more applications, and the activation switch was pushed with the manual operation button of the input section 3.

[0109] Drawing 26 is drawing showing the 1st communications protocol between the compound peripheral device shown in drawing 1 , and a server computer.

[0110] As shown in this drawing, by performing communications processing, processing at the time of the startup of a between [a peripheral device and a server computer] is performed, and a desired program is executed.

[0111] in addition, as the point which stores the application program transmitted and loaded from a host computer in this example in a peripheral device You may be the external memory section 55 instead of RAM4. In this case In program execution, the manual operation button analysis section 131 with the manual operation button of the input section 3 one was specified out of one or more applications, and the activation switch was pushed, if thing recognition is carried out The program which read the program specified out of the program to which the program specified out of two or more programs was read into, and the data readout section 141 was written in the external memory section 55, and was specified from program storage area 4a of RAM4 is performed.

[0112] Drawing 27 is a flow chart which shows an example of the application executive operation procedure by the side of the peripheral device in the compound peripheral

device concerning this invention. In addition, (1) - (11) shows each step. Moreover, the processing shown in this example is equivalent to the processing by the side of the peripheral device at the time of performing application closed within the peripheral device.

[0113] First, if it recognizes that the manual operation button analysis section 131 specified one out of one or more applications from the manual operation button 3, and activation switch 3b was pushed, (1) and the data transmitting section 162 will send advice of processing initiation to a host computer (2). It stands by that the data receipt section 161 receives a processing initiation response from a host computer. Subsequently, (3), Will end processing, if it becomes NO, and the program name of the program which the read-out section 151 will perform from program control table 5a in ROM5 if it becomes YES is read. When the data transmitting section 162 sends a transfer request of this program name file to a host computer, (4), The data receipt section 161 the answerback to a transfer request from a host computer Reception (5), the answerback concerned -- a transfer response ***** -- judging -- (6), if it becomes NO (transfer refusal) In order to send advice of processing termination to a host computer, when it progresses to a step (10) and YES, i.e., a transfer response, is received if the data receipt section 161 waits for the data transfer of a program file from a host computer and receives data transfer -- (7) -- the data write-in section 143 writes the content of the program in program storage area 4a in RAM4 one by one. It judges whether the flag which shows the end of file to the received data is in close. Subsequently, (9), It is judged that all of return and the content of the file of the program requested by the data when becoming YES were received to the step (7) when becoming NO. The data transmitting section 162 performs the program by which (10) and the activation section 142 were stored in program storage area 4a of RAM4 by ending delivery and load processing to a host computer in advice of processing termination, and ends (11) and processing.

[0114] Drawing 28 is a flow chart which shows an example of the application executive operation procedure by the side of the host computer shown in drawing 22 . In addition, (1) - (10) shows each step. Moreover, each means of a control section 51 has the composition of performing processing of each step, in the program which is residing permanently and operating within the internal-storage section 54 of a computer.

[0115] First, if it stands by that the data signal receipt means 51-1 receives the advice of processing initiation from a compound peripheral device and (1) and advice of initiation are received, the data signal sending-out means 51-2 will send a processing initiation response to a host computer (2). Similarly it stands by that the data signal receipt means 51-1 receives the transfer request from a compound peripheral device. (3), If a transfer request is received, the program name to which the file search means 51-5 has been sent about the request will be searched from the external memory section 55. (4), When it judges whether the requested program file was found and (5) and the requested program file do not find it In order to send out transfer refusal to a compound peripheral device and to stand by (7) and advice of processing termination, When the program file requested by progressing to a step (10) is found The data signal sending-out means 51-2 reads [delivery (6) and the read-out means 51-4] the content of the program file the transfer response was requested [program file] in the external memory section 55 by the compound peripheral device, and the data signal sending-out means 51-2 starts data

transfer towards a compound peripheral device (8). subsequently, a ***** [having transmitted the end-of-file ** flag] -- judging -- (9) -- if it becomes NO, and it will stand by return and receiving advice of processing termination from a compound peripheral device if it becomes YES to a step (8) and (10) and advice of processing termination will be received, the processing by the side of a host computer will be ended.

[0116] Drawing 29 is drawing showing the communications protocol between the compound peripheral device shown in drawing 22 and drawing 23 , and a host computer.

[0117] As shown in this drawing, by performing communications processing, processing at the time of the startup of a between [a peripheral device and a host computer] is performed, and a desired program is performed.

[0118] Drawing 30 is the block diagram showing other examples of a configuration of the compound peripheral device shown in drawing 23 , and has given the same sign to the same thing as drawing 23 .

[0119] The application executive operation actuation by the side of the compound peripheral device shown in drawing 30 is explained referring to the flow chart shown in drawing 31 hereafter.

[0120] Drawing 31 is a flow chart which shows an example of the application executive operation procedure by the side of the compound peripheral device shown in drawing 30 . In addition, (1) - (18) shows each step.

[0121] If, as for close, a power source is started by the compound peripheral device, the data transmitting section 162 sends out advice of processing initiation to a host computer (1). Subsequently, it judges whether the data receipt section 162 received the processing initiation response from the host computer, and a transfer request of (2) and the list of application programs which the data transmitting section 162 closed within the compound peripheral device when becoming NO, ending processing and receiving the processing initiation response is sent out to a host computer (3). A receipt (4) and the answerback concerned judge by this whether it is a transfer response from a host computer for answerback of as opposed to a transfer request in the data receipt section 161. In (5) and transfer refusal In order to send advice of processing termination to a host computer, when progressing to a step (18) and receiving a transfer response, if the data receipt section 161 receives a receipt (6) and data transfer, the data transfer of a host computer to a program listing The data write-in section 143 writes the content of the program in program control table storing field 4b of RAM4 one by one (7). subsequently, a ***** [that the flag which shows termination of a list to the received data was in close] -- judging -- (8) -- if it becomes NO, it will be judged to a step (6) that all of return and the content of a list requested by the data concerned when becoming YES were received. Subsequently, the data readout section 141 reads the first program name from program control table 4b of RAM4, and (9) and the data transmitting section 162 send a transfer request of the program name file concerned to a host computer (10). the data receipt section 161 -- the answerback from a host computer -- a receipt (11) and the answerback concerned -- a transfer response ***** -- judging -- (12) -- if it will progress after a step (16) if it becomes NO, the data receipt section 161 will stand by the data transfer of a program file from a host computer if it becomes YES, and data transfer is received -- (13) and (14) by which the data write-in section 143 writes the content of

the program in program storage area 4a of RAM4 one by one. subsequently, a ***** [that the flag which shows the end of file to the data which the data receipt section 161 received is in close] -- judging -- (15) -- if it becomes NO -- a step (13) -- return -- if it becomes YES, it will move to transfer processing of the next program on program control table 4b. subsequently, a ***** [that transfer processing of the last program was completed] -- judging -- (16) -- if it becomes YES, it will progress after a step (18), and if the data transmitting section 162 sends out advice of processing termination to a host computer, ends processing and becomes NO, the following program name will be acquired from program control table 4b, and it will return to (17) and a step (10).

[0122] In addition, application activation is performed according to the communications protocol as shows the above processings to drawing 33 .

[0123] Drawing 32 is a flow chart which shows an example of the application executive operation procedure by the side of the host computer shown in drawing 22 . In addition, (1) - (16) shows each step. In addition, each processing has composition which each means performs based on the program memorized by the internal-storage section 54 as a resident program.

[0124] First, if the data signal receipt means 51-1 stands by the advice of processing initiation from a peripheral device and receives (1) and advice of initiation, the data signal sending-out means 51-2 will send a processing initiation response to a host computer (2). If similarly it stands by that the data signal receipt means 51-1 receives a list transfer request from a compound peripheral device and (3) and a transfer request are received, the list of the application which the file search means 51-5 closed within the compound peripheral device will be searched from the external memory section 55 (4). Subsequently, it judges whether the program listing was found, and (5) and in order [if it becomes NO,] to stand by delivery (16) and advice of processing termination to a compound peripheral device in transfer refusal, it returns to a step (15).

[0125] On the other hand, by the judgment of a step (5), in YES, read-out and the data signal sending-out means 51-2 turn to a compound peripheral device the content of the program listing of the application which closed the transfer response to the compound peripheral device with the compound peripheral device which has delivery (6) and the read-out means 51-4 in the external memory section 55, and the data transfer of a program listing is started (7). Subsequently, it judges whether data transfer of the ending flag of a list was carried out, and if it becomes NO, and it will stand by return and receiving a file transfer request from a peripheral device while the data signal receipt means 51-1 stands by processing termination to a step (7) if it becomes YES, and (9) and a file transfer request are received at it, the file search means 51-5 will search (8) and the program name sent about the request from the external memory section 55 (10). If it becomes NO, will progress to a step (16), and transfer refusal is transmitted to a compound peripheral device. subsequently, a ***** [that the requested program file was found] -- judging -- (11) -- If the data signal receipt means 51-1 stands by advice of processing termination and becomes YES, after sending a transfer response to a compound peripheral device, (12), Read-out and the data signal sending-out means 51-2 turn to a compound peripheral device the content of the program file the data signal receipt means 51-1 was requested [program file] in the external memory section 55, and data transfer is started (13). It judges whether the end-of-file ** flag was transmitted.

Subsequently, (14), if it becomes NO -- a step (13) -- return and receiving [the data signal receipt means 51-1]-from compound peripheral device-advice of processing termination standby if it becomes YES -- carrying out -- (15) -- the processing by the side of a host computer being ended if it becomes YES, and, if it becomes NO For example, if a transfer request is again sent from a compound peripheral device, without sending advice of processing termination, application activation will be continued according to a communications protocol as shows the data transfer of return and an above-mentioned program file to a step (13) at drawing 33 .

The [4th example] Drawing 34 is the block diagram showing the 1st functional processing configuration in the compound peripheral device in which the 4th example of this invention is shown, and has given the same sign to the same thing as drawing 1 and drawing 3 . In addition, in this example, the 1st functional processing is a copy function.

[0126] In drawing, 101 is the manual operation button analysis section, and recognizes the input from a manual operation button 3. 107 is the read-out section and reads the data currently written on RAM4. 108 is the program execution section and performs the control program memorized by ROM5. 109 is the data write-in section and performs the data writing to RAM4. 110 is the image printing section and prints the image information memorized by RAM4. In addition, a printer engine configuration may be a ** ink jet device, or may be a laser beam printer device.

[0127] 111 is an image read station and is read in the resolution which had the manuscript image specified. in addition, the image read station 111 -- a multiple-value image -- and - - or a color picture -- it is made possible to read all and various image edit processings are constituted possible by the image-processing processor which is not illustrated. 112 shall be a paper feed/discharge unit, should feed the image read station 111 with the manuscript, and shall be equipped with the ADF function or RDF function delivered to an after [manuscript read] predetermined location.

[0128] 4-1 is a table managed table storing field, and the address of the loaded program which was mentioned above is memorized. 4-2 is an image data storage field, and memorizes the image data outputted from the image read station 111.

[0129] Hereafter, copy function processing actuation is explained.

[0130] If the manual operation button analysis section 101 recognizes that the "copy initiation" switch was pushed, the read-out section 107 will perform a program control table 4-"copy" program from a starting address for the program start address of the program of copy application. [which reads from 1 and has the program execution section 108 on ROM5]

[0131] If a copy" program is started, after a paper feed/discharge unit 112 will feed paper to the form set in the image reader, the image information of the form with which the image read station 111 is set is read by fixed memory. And the data write-in section 109 stores the read image data in the image data storage field 4-2. The image printing section 110 performs [the stored image data] printing for delivery and the image data to have read in the printing section 18. And if the image which the image read station 111 reads is lost, a paper feed/discharge unit 112 will deliver paper to the form of an image reader, and will end the program of "copy" application.

[0132] Drawing 35 is the block diagram showing the 2nd functional processing configuration in the compound peripheral device in which the 4th example of this invention is shown, and has given the same sign to the same thing as drawing 1 , drawing 3 , and drawing 34 . In addition, in this example, the 2nd functional processing is a facsimile transmitting function.

[0133] In drawing, 120 is the facsimile protocol processing section and controls a predetermined communication control procedure (facsimile protocol: G3, G4) for the pictorial communication on the telephone line through the line control section 9. 130 is the telephone call Monitoring Department and supervises the talk state by the telephone line connected through the telephone interface 31.

[0134] 4-3 is a telephone number train storing field, and memorizes the telephone number train dialed from telephone.

[0135] Hereafter, facsimile transmitting-function processing actuation is explained.

[0136] If the manual operation button analysis section 101 recognizes that the "facsimile transmitting initiation" switch was pushed, the read-out section 107 will perform a program control table 4-"facsimile transmitting" program from a starting address for the program start address of facsimile transmitting application. [which reads from 1 and has the program execution section 108 on ROM5]

[0137] If a "facsimile transmitting" program is started, an operator will dial from telephone and a dial signal will be transmitted through a path cord with telephone 31, the **** interface 12 will analyze this dial signal, and a number train will be written in the telephone number train storing field 4-3 through the data write-in section 109. If the manual operation button analysis section 101 recognizes that the "facsimile transmitting initiation" switch was pushed again, the read-out section 107 will send the number train inputted previously to the line control section 9, and will telephone. If connected, the facsimile protocol processing section 120 will start the protocol of facsimile. If an initial protocol is completed, after a paper feed/discharge unit 112 will feed paper to the form set in the image reader 17, the image read station 111 reads the image information of the manuscript set in the image reader 17 by fixed memory. The data write-in means 109 stores the read image data in the image data storage field 4-2. The facsimile protocol 120 performs facsimile transmission for the image data stored image printing section 110 in the line control section 9 through delivery, a modem 10, or a modem 11. If the image which the image read station 111 reads is lost, a paper feed/discharge unit 112 will deliver paper to the manuscript of the image reader 17, and will feed paper to the following manuscript. If paper cannot be fed to the following manuscript, the form which should be transmitted at the event cuts a circuit, after [which was ended] it judges and the facsimile protocol 120 performs a termination protocol, and the program of "facsimile transmitting" application is ended.

[0138] Drawing 36 is the block diagram showing the 3rd functional processing configuration in the compound peripheral device in which the 4th example of this invention is shown, and has given the same sign to the same thing as drawing 1 , drawing 3 , drawing 34 , and drawing 35 . In addition, in this example, the 3rd functional processing is the print facility of call record.

[0139] drawing -- setting -- 131 -- the time-of-day read-out section -- it is -- the time check from the clock circuit 13 -- data are read. 132 is the time-of-day count section, the time amount from call initiation to call termination is calculated, and the communication link time amount concerned is written in the telephone call record table 4-4 by the data write-in section 109. 133 is the text print section and creates printing data by the tabular format in order of a dispatch phase hand, time, and duration of a call.

[0140] Hereafter, print facility processing actuation of call record is explained. In addition, processing separates in the resident section and the transient section, and this example is performed.

[0141] First, the resident section is supervising whether the telephone call Monitoring Department 130 telephoned through the telephone interface 12. The data write-in section 109 adds a record to the telephone call record table 4-4, and the telephone call Monitoring Department 130 stores a partner's telephone number and time data, if it gets to know having stored the number train in the telephone number train storing field 4-3 through the data write-in section 109, and having sent and connected, when telephone dialed. Then, if it gets to know that the circuit was cut, the time cut similarly is acquired, the time-of-day count means 132 calculates the elapsed time from start time, and elapsed time is stored in the record of the call record table 4-4 through the data write-in section 109.

[0142] On the other hand, if the manual operation button analysis section 101 recognizes that the "call record printing initiation" switch was pushed, as for the transient section, the read-out section 107 will perform a program control table 4-"call record printing" program from a starting address for the program start address of call record printing application. [which reads from 1 and has the program execution section 108 on ROM5]

[0143] If a "call record printing" program is started, the text print section 133 creates printing data by the tabular format in order of a dispatch place, time, and duration of a call, and the image printing section 110 will send each record data of the telephone call record table 4-4 to the printing section 18, and will print them. When finishing printing a part for all records, a "call record printing" program is ended.

[0144] Drawing 37 is the block diagram showing the 4th functional processing configuration in the compound peripheral device in which the 4th example of this invention is shown, and has given the same sign to the same thing as drawing 1 , drawing 3 , drawing 34 , and drawing 35 . In addition, in this example, the 4th functional processing is the print facility of a still video.

[0145] In drawing, 140 is the image data readout section and reads the image data of a still video from the image processing systems (VTR, video camera, etc.) which have the extended device 23, for example, a still video camera, or a still video output function.

[0146] Hereafter, print facility processing actuation of a still video is explained.

[0147] If the manual operation button analysis section 101 recognizes that the "printing initiation of still video" switch was pushed, the read-out section 107 will perform a program control table 4-"printing of still video" program from a starting address for the program start address of the printing application of a still video. [which reads from 1 and has the program execution section 108 on ROM5]

[0148] If "printing of still video" program is started, the image data readout section 1140 will read the data of the static image of KARENTO stored in the still video (extended device 23) by fixed memory. The data write-in section 109 stores the read image data in the image data storage field 4-2. If this storing is completed, the image printing section 110 will print a part for delivery and the read image for the stored image data in the printing section 18. When the image which the image data readout section 140 reads was lost and it is judged that print the static image for one screen was finished, "printing of still video" program is ended.

[0149] Drawing 38 is the block diagram showing the 5th functional processing configuration in the compound peripheral device in which the 4th example of this invention is shown, and has given the same sign to the same thing as drawing 1, drawing 3, drawing 34, and drawing 35. In addition, in this example, the 5th functional processing is a functional processing activation alert function.

[0150] In drawing, 102 is a display and control section and controls a display in the ideography section 2. 103 is the alarm output section, drives a sound source 15 and warns of the functional processing activation middle class. 104 is the advice section of an operating condition, supervises the operating condition of a device and printing section 18 grade [compare], and notifies the status information to the instruction transmitting section 106. 105 is the instruction receipt section and carries out receipt analysis of the instruction from a host computer. 106 is the instruction transmitting section and transmits a preparation O.K. command to a host computer. 4-5 is a message storing field during an activity, and the message for notifying the race condition accompanying functional processing is memorized.

[0151] When "copy" functional processing is being performed and the instruction receipt section 105 receives the instruction from a host computer as a functional processing state hereafter, the advice section 104 of an operating condition checks the operating condition of the printing section, and in the case, the printing section 18 answers a letter in the command which shows the purport which the instruction transmitting section 106 is using to a host computer, when it is [current] under activity.

[0152] If the advice section 104 of an operating condition acquires the operating condition of the printing section 18 and is not current using [be / it] it on the other hand when the manual operation button analysis section 101 has recognized that the "copy initiation" switch was pushed, "copy" functional processing will be performed as mentioned above.

[0153] Moreover, if the advice section 104 of an operating condition acquires the operating condition of the printing section 18 and is current printing, when there is an output request to the printing section 18 from a host computer, since the printing section 18 will be under activity A message is read during the activity stored in the message storing field 4-5 during the activity through the data read station 107, a display and control section 102 displays a message on a display 2 during an activity, and the alarm output section 103 generates an alarm sound in a loudspeaker 16 through a sound source 105.

[0154]

[Effect of the Invention] since a program execution means carries out reading appearance of one of the application programs downloaded for the storage means from the server computer, executes them and controls actuation of one of said functional processing means based on the selection activation directions by the directions means according to the 1st this invention concerning this invention as having explained above, the functional processing escape of circumference compound equipment can perform free.

[0155] According to the 2nd this invention, it is what constituted the storage means from an internal-memory medium, and only required application can be downloaded.

[0156] According to the 3rd this invention, it is what constituted the storage means from an external memory medium, and two or more applications can be downloaded simultaneously.

[0157] Since the selection directions of one of the application programs downloaded from a server computer with the directions from an application selection means are carried out according to the 4th this invention, only desired application is downloadable. According to the 5th this invention, a transfer means can carry out the junction transfer of one of the applications also at the circumference compound equipment which be memorized for a storage means and which is not equipped with communication facility with a server computer since it shifts, that application program is read and it transmits to other circumference compound equipments through a predetermined communication line.

[0158] According to the 6th this invention, since a program execution means is performed reading one of the application programs downloaded for the storage means from the host computer based on the selection activation directions by the directions means and controls actuation of one of said functional processing means, it can function each functional processing means cheaply in an addition and an escape using a simple network.

[0159] According to the 7th this invention, since the storage means was constituted from an internal-memory medium, only required application is downloadable.

[0160] According to the 8th this invention, since the storage means was constituted from an external memory medium, two or more applications are simultaneously downloadable.

[0161] According to the 9th this invention, since an application selection means carries out the selection directions of one of the application programs downloaded from a storage means, it can download only desired application.

[0162] According to the 10th this invention, since one of the application programs downloaded from a host computer is specified beforehand, an assignment means can simplify the assignment application program transfer control from a host computer, and can download ***** efficiently.

[0163] According to the 11th this invention, based on the selection activation directions by this directions means, please carry out reading appearance, shift from said external memory means, load that application program, and an internal-storage means is made to memorize. Since a program execution means performs loaded this application and actuation of one of said functional processing means is controlled Downloading two or more required applications collectively, even when there is little memory space of an

internal-storage means, required application can be chosen and each functional processing can be performed efficiently.

[0164] Since according to the 12th this invention each application with which the combination functional directions condition by the directions means was analyzed, and the combination actuation control means was memorized by the sequential storage means is read and combination actuation of each functional processing means is controlled, advanced compound functional processing which combined various functional processings can be performed.

[0165] Since the activation initiation of combination functional processing that a control means was specified controls exclusively according to the 13th this invention, judging the present busy condition of each functional processing means which analyzes the combination functional directions condition by the directions means, and performs combination functional processing, combination functional processing and each functional processing can perform efficiently, avoiding contention with combination functional processing and each functional processing.

[0166] According to the 14th this invention, since a control means reports the present busy condition of each judged functional processing means, it can report certainly the race condition of combination functional processing and each functional processing to a user.

[0167] Therefore, the outstanding effectiveness that functional modification of each functional processing means, functional expansion, etc. can be performed cheaply and efficiently is done so, without connecting an external device to a compound peripheral device in any way.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] It is a block diagram explaining the configuration of the compound peripheral device in which the 1st example of this invention is shown.

[Drawing 2] It is a block diagram explaining the system configuration of the server computer which communicates with the compound peripheral device shown in drawing 1.

[Drawing 3] It is a block diagram explaining the detail configuration of a control section 1 shown in drawing 1.

[Drawing 4] It is the flow chart which shows an example of the starting procedure in the compound peripheral device concerning this invention.

[Drawing 5] It is the flow chart which shows an example of the startup procedure by the side of the server computer connected to the compound peripheral device concerning this invention.

[Drawing 6] It is drawing showing the 1st communications protocol between the compound peripheral device shown in drawing 1 , and a server computer.

[Drawing 7] It is the flow chart which shows an example of the application executive operation procedure by the side of the peripheral device in the compound peripheral device concerning this invention.

[Drawing 8] It is the flow chart which shows an example of the application executive operation procedure by the side of the server computer in the compound peripheral device concerning this invention.

[Drawing 9] It is drawing showing the 2nd communications protocol between the compound peripheral device shown in drawing 1 , and a server computer.

[Drawing 10] It is a block diagram explaining other detail configurations of a control section 1 shown in drawing 1 .

[Drawing 11] It is the flow chart which shows an example of the application executive operation procedure by the side of the peripheral device in the compound peripheral device concerning this invention.

[Drawing 12] It is the flow chart which shows an example of the application executive operation procedure by the side of the program file transfer in the compound peripheral device concerning this invention.

[Drawing 13] It is drawing showing an example of the program control table memorized in the program control table storage region shown in drawing 10 .

[Drawing 14] It is the important section detail block diagram of the compound peripheral device in which the 2nd example of this invention is shown.

[Drawing 15] It is the flow chart which shows an example of procedure at the time of starting in the compound peripheral device concerning this invention.

[Drawing 16] It is the flow chart which shows an example of the nonresident program executive operation procedure based on selecting-switch 3a shown in drawing 14 .

[Drawing 17] It is the section which shows an example of the program control table memorized to the program control table storing field shown in drawing 14 .

[Drawing 18] It is the flow chart which shows an example of the program load procedure in the compound peripheral device concerning this invention.

[Drawing 19] It is the flow chart which shows an example of the program selection / executive operation procedure in the compound peripheral device in which the 2nd example of this invention is shown.

[Drawing 20] It is the section which shows an example of the program control table memorized to the program control table storing field shown in drawing 14 .

[Drawing 21] It is the section which shows an example of the program control table memorized to the program control table storing field shown in drawing 14 .

[Drawing 22] It is a block diagram explaining the configuration of the host computer connected to the compound peripheral device in which the 3rd example of this invention is shown.

[Drawing 23] It is a block diagram explaining the configuration of the compound peripheral device in which the 3rd example of this invention is shown.

[Drawing 24] It is the flow chart which shows an example of the starting procedure of the compound peripheral device in which the 3rd example of this invention is shown.

[Drawing 25] It is the flow chart which shows an example of the startup procedure by the side of the host computer shown in drawing 22 .

[Drawing 26] It is drawing showing the communications protocol between the compound peripheral device shown in drawing 22 and drawing 23 , and a host computer.

[Drawing 27] It is the flow chart which shows an example of the application executive operation procedure by the side of the peripheral device in the compound peripheral device concerning this invention.

[Drawing 28] It is the flow chart which shows an example of the application executive operation procedure by the side of the host computer shown in drawing 22 .

[Drawing 29] It is drawing showing the communications protocol between the compound peripheral device shown in drawing 22 and drawing 23 , and a host computer.

[Drawing 30] It is the block diagram showing other examples of a configuration of the compound peripheral device shown in drawing 23 .

[Drawing 31] It is the flow chart which shows an example of the application executive operation procedure by the side of the compound peripheral device shown in drawing 30 .

[Drawing 32] It is the flow chart which shows an example of the application executive operation procedure by the side of the host computer shown in drawing 22 .

[Drawing 33] It is drawing showing the communications protocol between the compound peripheral device shown in drawing 22 and drawing 23 , and a host computer.

[Drawing 34] It is the block diagram showing the 1st functional processing configuration in the compound peripheral device in which the 4th example of this invention is shown, and is **.

[Drawing 35] It is the block diagram showing the 2nd functional processing configuration in the compound peripheral device in which the 4th example of this invention is shown.

[Drawing 36] It is the block diagram showing the 3rd functional processing configuration in the compound peripheral device in which the 4th example of this invention is shown.

[Drawing 37] It is the block diagram showing the 4th functional processing configuration in the compound peripheral device in which the 4th example of this invention is shown.

[Drawing 38] It is the block diagram showing the 5th functional processing configuration in the compound peripheral device in which the 4th example of this invention is shown.

[Description of Notations]

1 Control Section

2 Display
3 Manual Operation Button
4 RAM
4a Program storage area
5 ROM
5a Program control table storing field
5b Telephone number storing field
121 Display and Control Section
131 Manual Operation Button Analysis Section
141 Data Readout Section
142 Activation Section
143 Data Write-in Section
151 Read-out Section
161 Data Receipt Section
162 Data Transmitting Section
163 Dial Section
164 Protocol Analysis Section

[Translation done.]